

AMENDED CLAIMS

[received by the International Bureau on 12 September 2005 (12.09.05);
original claims 1-22 replaced by new claims 1-21 (4 pages)]

WHAT IS CLAIMED IS:

1. An apparatus for orienting blocks into a desired position, comprising a pair of upper and lower turntables including respectively upper and lower block supporting surfaces, said lower supporting surface extending outwardly
5 of, and below, said upper supporting surface, a peripheral wall outwardly spaced from said upper supporting surface, said upper turntable, said lower supporting surface and said peripheral wall defining a gutter dimensioned to receive blocks therein in a substantially longitudinal orientation thereof, an outlet provided at a downstream end of said gutter for allowing substantially
10 oriented blocks to be discharged from said apparatus, whereby blocks fed to said apparatus are received by said upper turntable, are positioned by said apparatus in said gutter and are discharged from said apparatus via said outlet, wherein said upper and lower turntables rotate at different speeds and in a same direction.
- 15 2. An apparatus as defined in Claim 1, wherein said upper turntable comprises a central sloped structure adapted for displacing the blocks received thereon towards said upper supporting surface.
3. An apparatus as defined in Claim 2, wherein said sloped structure includes a section substantially shaped as at least part of a cone.
- 20 4. An apparatus as defined in Claim 1, wherein said peripheral wall defines an outside limit of said gutter.
5. An apparatus as defined in Claim 4, wherein said peripheral wall is stationary with said upper and lower turntables rotating inwardly thereof.
6. An apparatus as defined in Claim 1, wherein said outlet includes a
25 guide extending downstream of said gutter and adapted to receive blocks therefrom.
7. An apparatus as defined in Claim 6, wherein said guide comprises a pair of substantially straight, substantially parallel, substantially vertical

stationary walls, said guide constituting a substantially tangential continuation of said gutter at said downstream end thereof.

8. An apparatus as defined in Claim 7, wherein an outside wall of said stationary walls of said guide is substantially a continuation of a downstream
5 end of said peripheral wall.

9. An apparatus as defined in Claim 1, wherein said upper supporting surface is sloped outwardly downwardly towards said gutter.

10. An apparatus as defined in Claim 9, wherein said upper supporting surface includes a section substantially shaped as at least part of a cone,
10 said section sloping towards said gutter.

11. An apparatus as defined in Claim 1, wherein said upper supporting surface is provided with deflecting members adapted to cause the blocks to displace.

12. An apparatus as defined in Claim 11, wherein said deflecting members
15 are positioned close to a periphery of said upper supporting surface.

13. An apparatus as defined in Claim 12, wherein said deflecting members comprise bosses that protrude upwardly from said upper supporting surface.

14. An apparatus as defined in Claim 12, wherein said deflecting members comprise frictional elements that are substantially flush with said upper
20 supporting surface.

15. An apparatus as defined in Claim 12, wherein said deflecting members comprise fins extending substantially radially onto said upper supporting surface.

16. An apparatus as defined in Claim 1, wherein a spiral-shaped guiding
25 device is provided above said upper turntable for guiding the blocks fed to said apparatus onto and along said upper supporting surface towards a periphery of said upper supporting surface.

17. An apparatus as defined in Claim 16, wherein said guiding device is stationary and is configured to gradually guide the blocks outwardly along said upper turntable.

18. A method for orienting blocks into a desired position, comprising the
5 steps of:

(a) providing a pair of upper and lower turntables including respectively upper and lower block supporting surfaces, said upper and lower turntables rotating at different speeds and in a same direction, said lower supporting surface extending outwardly of, and below, said upper supporting
10 surface, said lower turntable being configured and sized so that blocks completely received thereon are in a substantially longitudinal orientation thereof;

(b) feeding blocks on said upper turntable with a rotation of said upper and lower turntables causing the blocks to take position on said lower
15 supporting surface in said substantially longitudinal orientation; and

(c) discharging the blocks in said substantially longitudinal orientation from said lower turntable.

19. An apparatus for orienting objects into a desired position, comprising a pair of upper and lower rotating supports including respectively upper and
20 lower object supporting surfaces, said lower supporting surface extending outwardly of, and below, said upper supporting surface, a peripheral wall outwardly spaced from said upper supporting surface, said upper rotating support, said lower supporting surface and said peripheral wall defining a gutter dimensioned to receive objects therein in a substantially same
25 orientation thereof, said gutter having an outlet for allowing substantially oriented objects to be discharged from said apparatus, whereby objects fed to said apparatus are received by said upper rotating support, are positioned by said apparatus in said gutter and are discharged from said apparatus via said outlet, wherein said upper and lower rotating supports rotate at different
30 speeds and in a same direction.

20. A method for orienting objects into a desired position, comprising the steps of:

(a) providing a pair of upper and lower rotating supports including respectively upper and lower object supporting surfaces, said upper and lower rotating supports rotating at different speeds and in a same direction, said lower supporting surface extending outwardly of, and below, said upper supporting surface, said lower rotating support being configured and sized so that objects completely received thereon are in a substantially same orientation thereof;

(b) feeding objects on said upper rotating support with a rotation of said upper and lower rotating supports causing the objects to take position on said lower supporting surface in said substantially same orientation; and

(c) discharging the objects in said substantially same orientation from said lower rotating support.

21. A method as defined in Claim 20, wherein said objects are elongated and wherein said same orientation is longitudinal.